

FIGURE 1

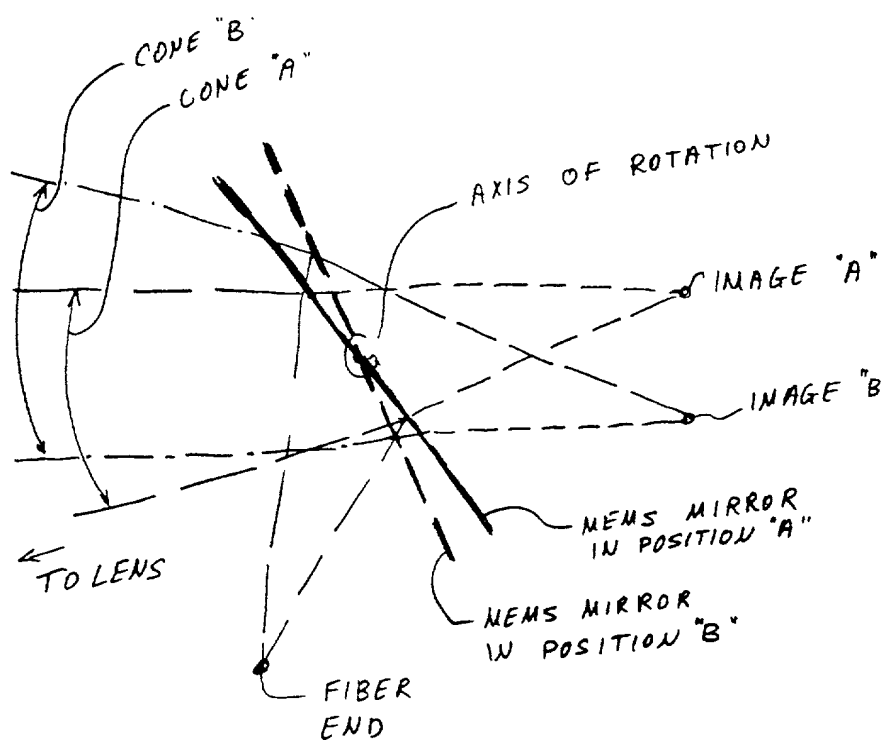


FIGURE 2

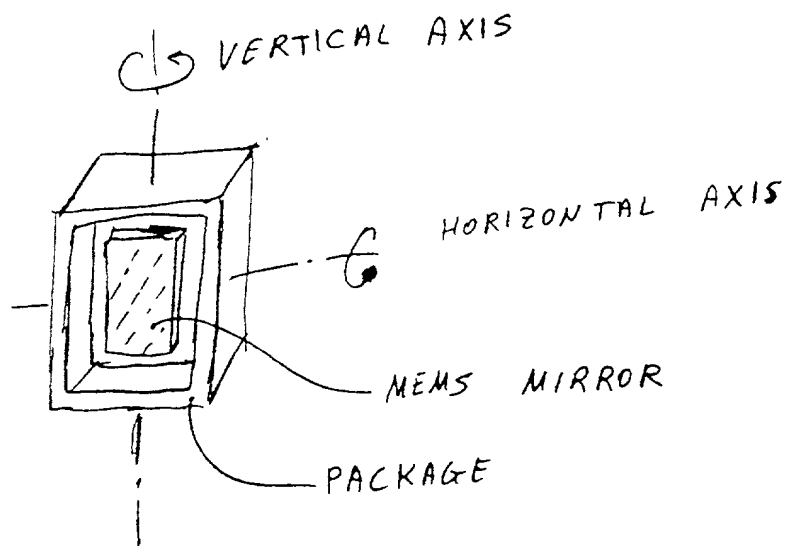


FIGURE 3

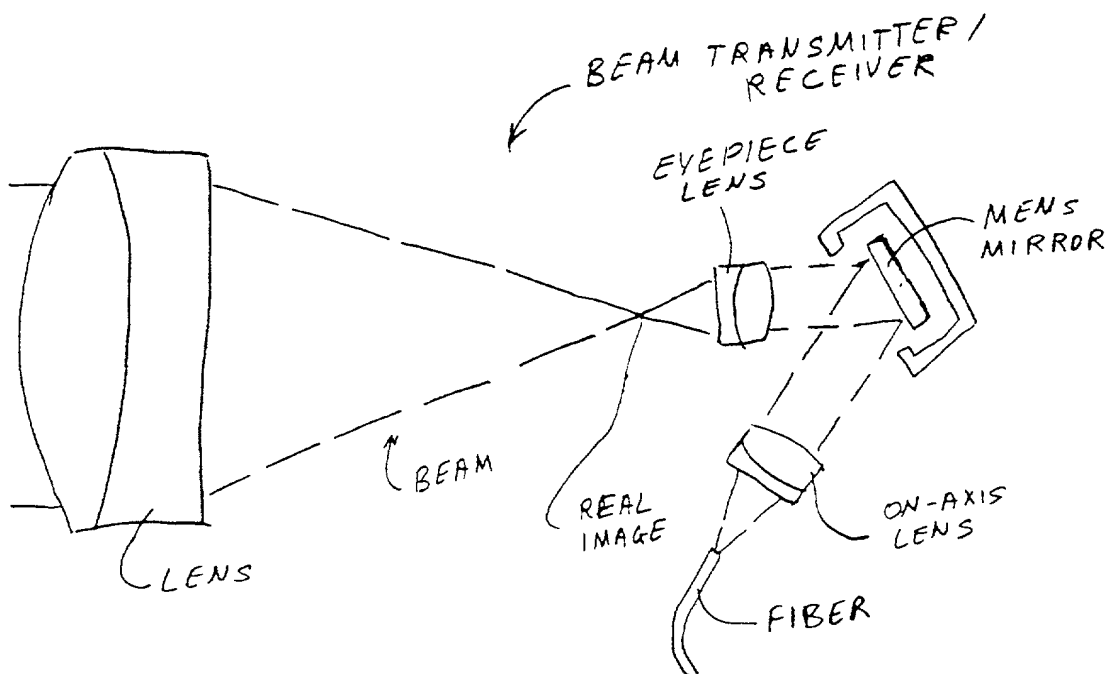


FIGURE 4

1. The first step in the design of a beam transmitter/receiver is the selection of the operating frequency. This is determined by the available spectrum and the required range of the system. The frequency must be chosen such that the signal can be transmitted over the required distance without excessive attenuation. The frequency must also be chosen such that the signal can be received by the receiver without interference from other sources. The frequency must also be chosen such that the signal can be transmitted over the required distance without excessive attenuation. The frequency must also be chosen such that the signal can be received by the receiver without interference from other sources.

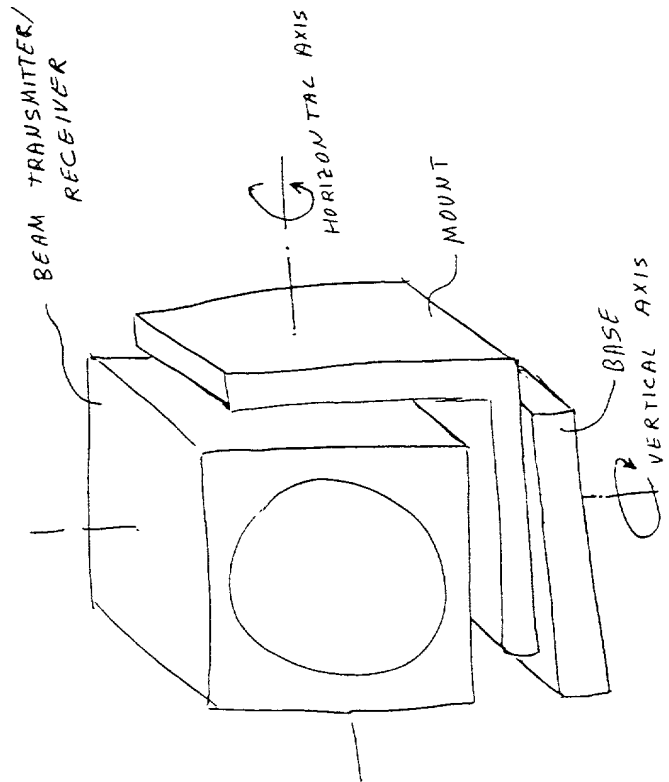


FIGURE 5 "

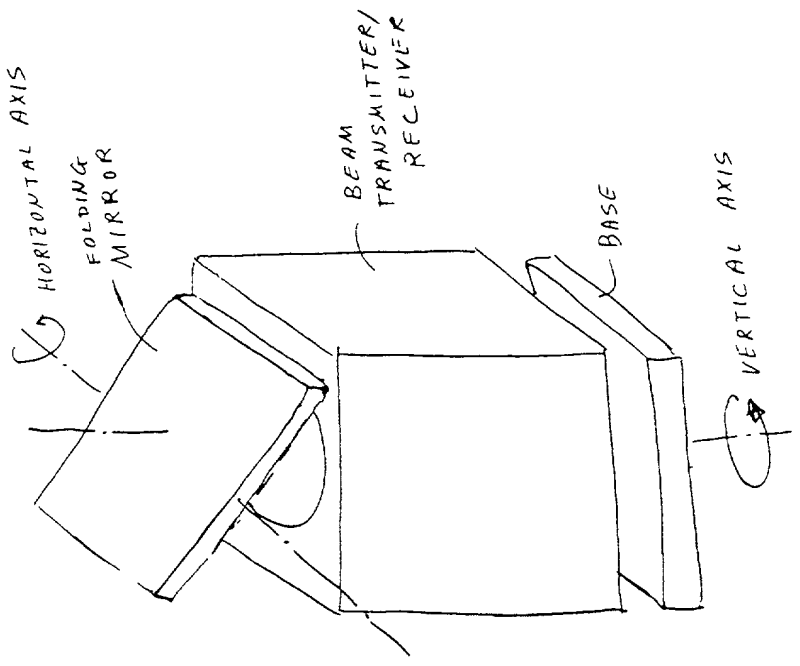


FIGURE 6

THIS DOCUMENT CONTAINS NEITHER RECOMMENDATIONS NOR  
CONCLUSIONS OF THE NATIONAL BUREAU OF STANDARDS  
AND IS NOT INTENDED TO BE USED FOR SUCH PURPOSES.

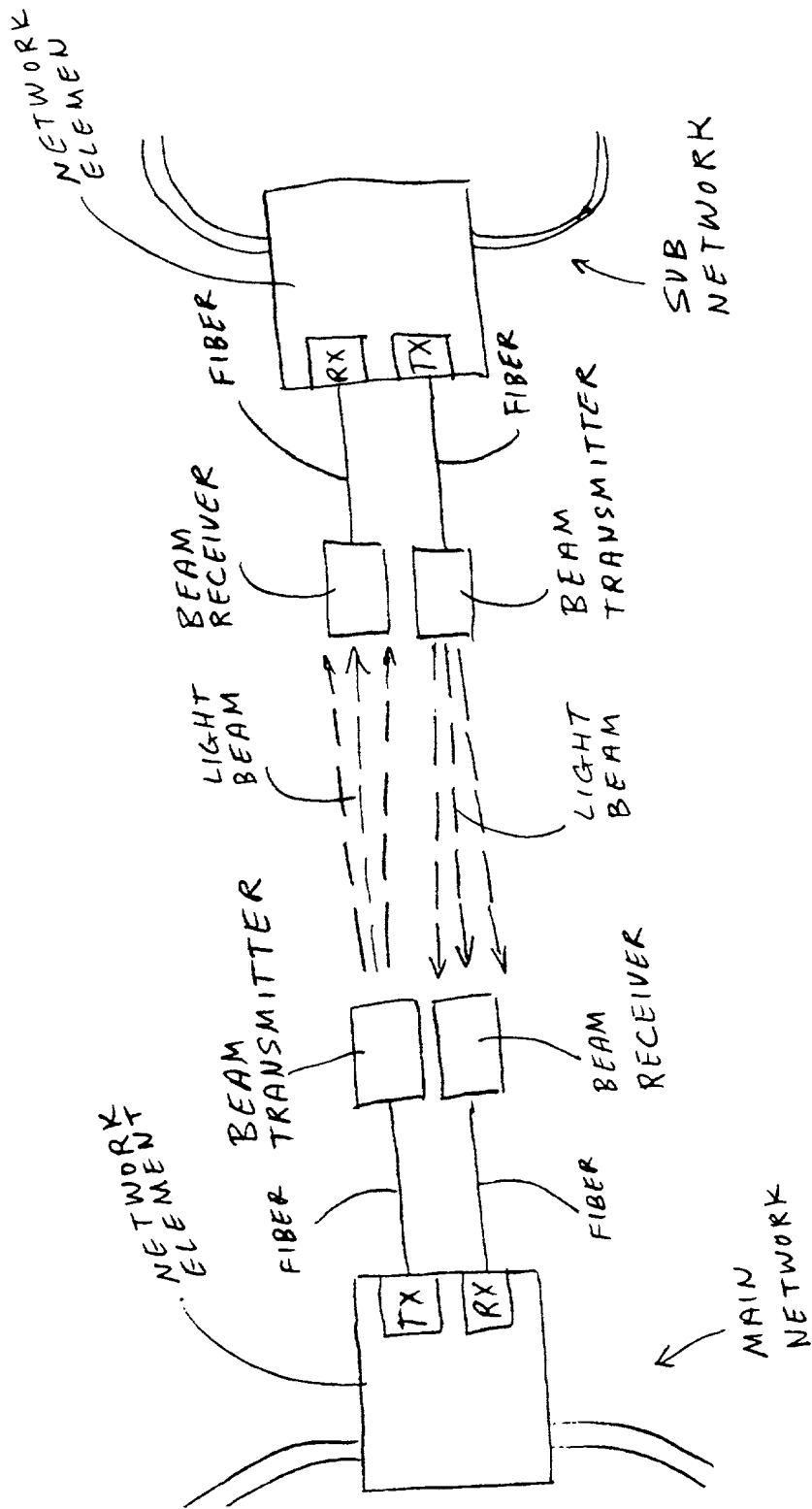


FIGURE 7

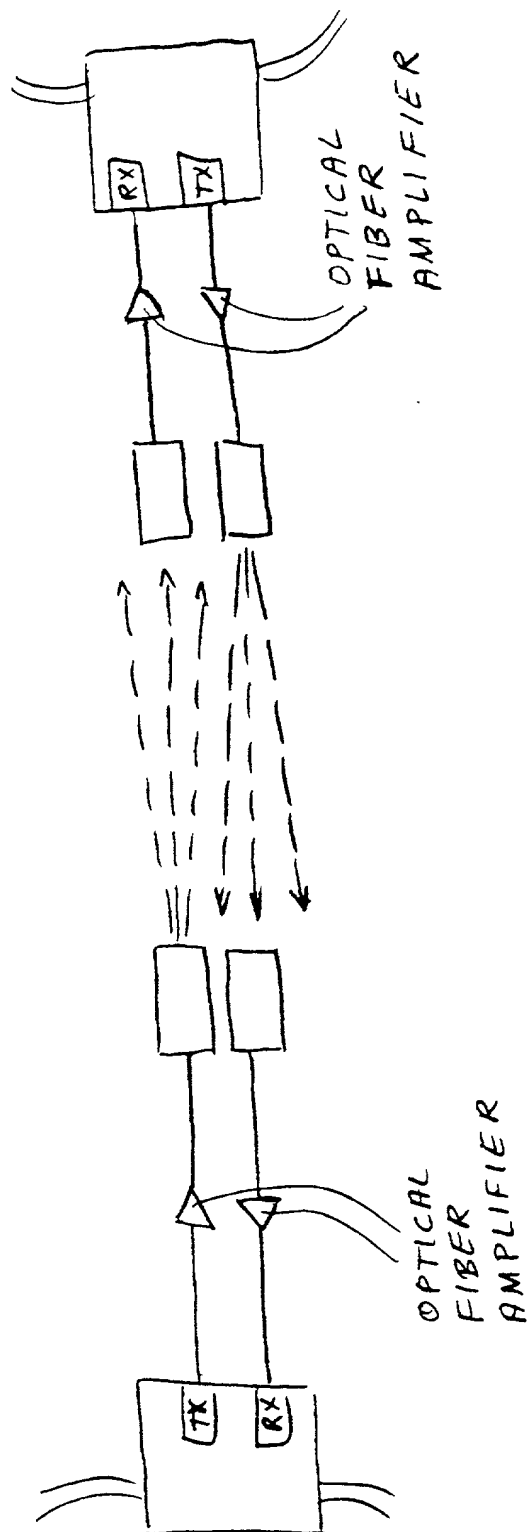


FIGURE 8

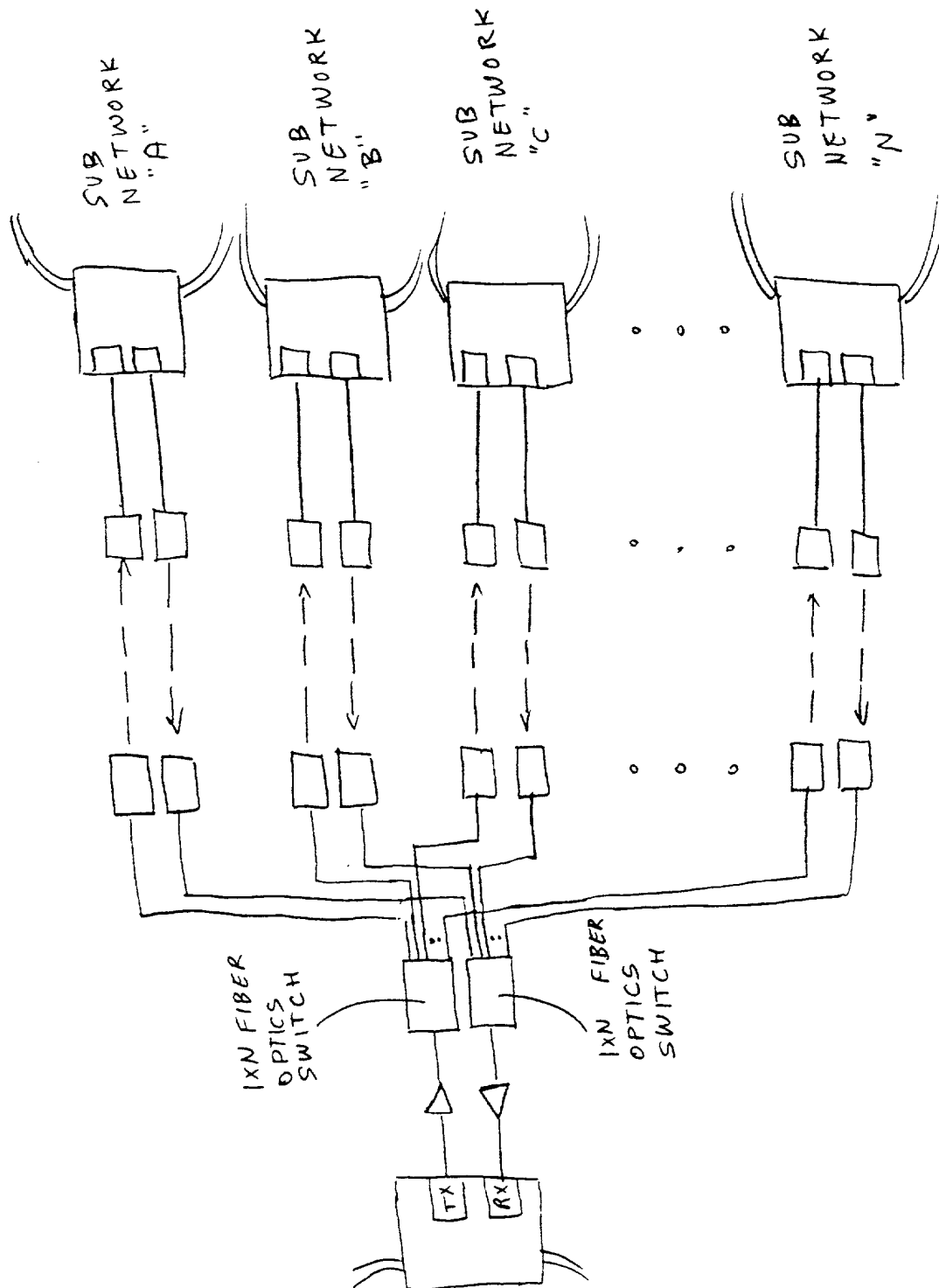


FIGURE 9

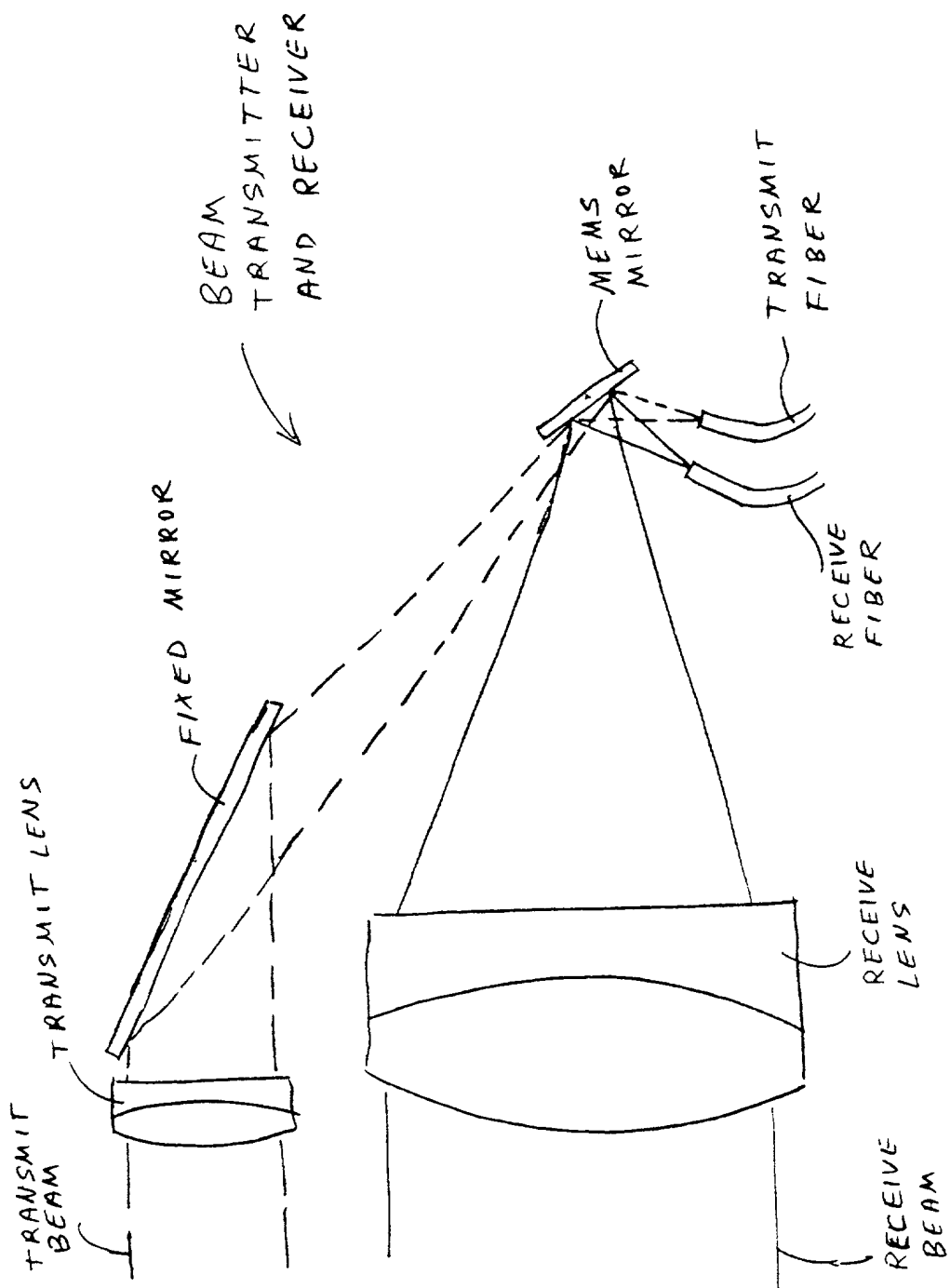


FIGURE 10

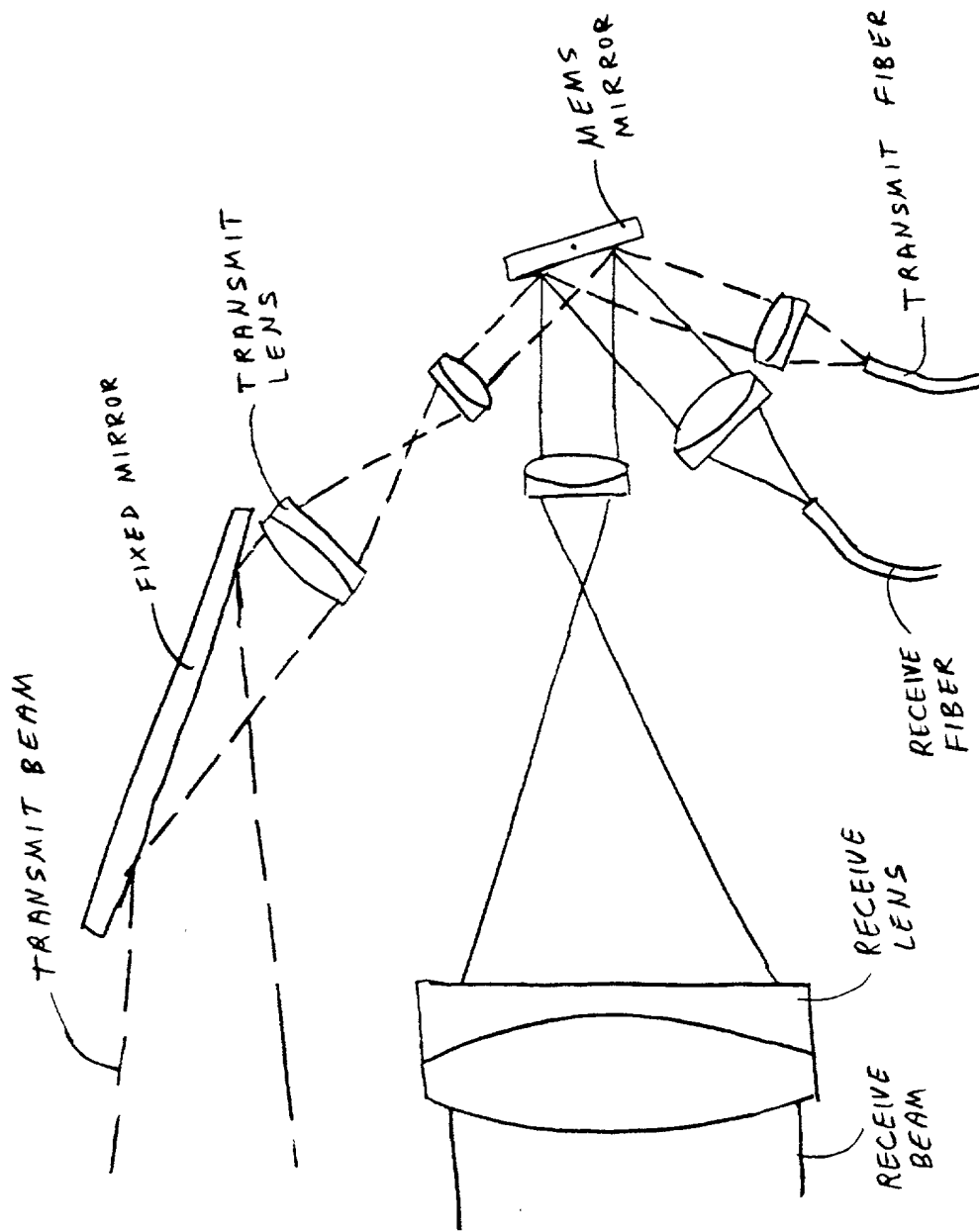


FIGURE 11



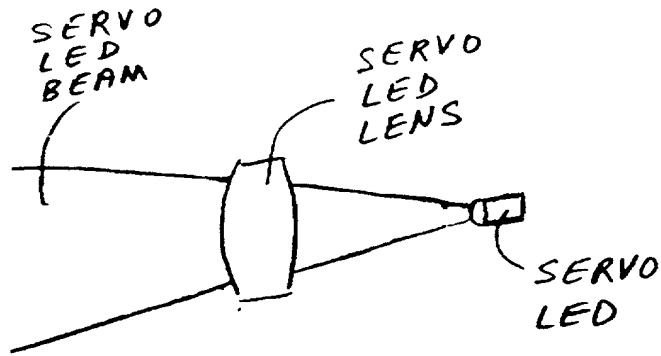


FIGURE 12

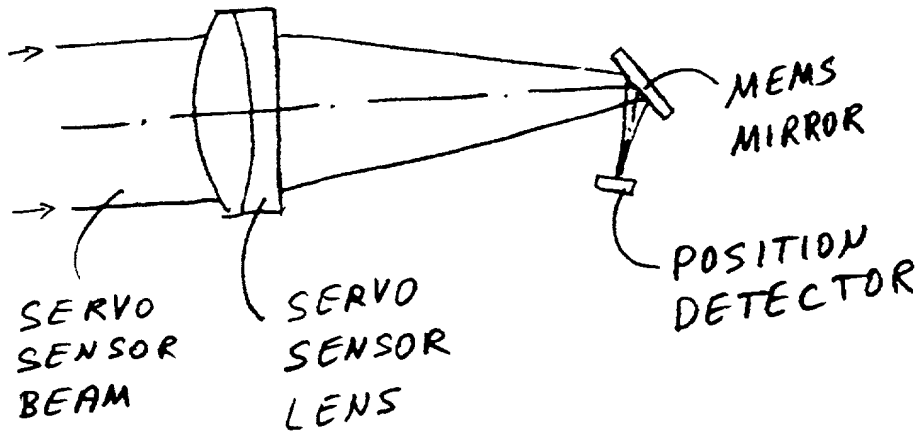


FIGURE 13

1. The first step in the design of a beam transmitter and receiver is the selection of the appropriate components. This includes the choice of the servo motor, the lens, the LED, the sensor, the mirror, the fiber, the detector, and the position detector.

BEAM TRANSMITTER AND RECEIVER

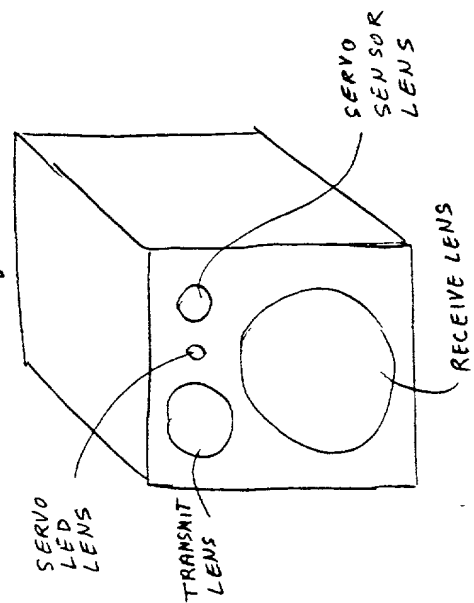


FIGURE 14

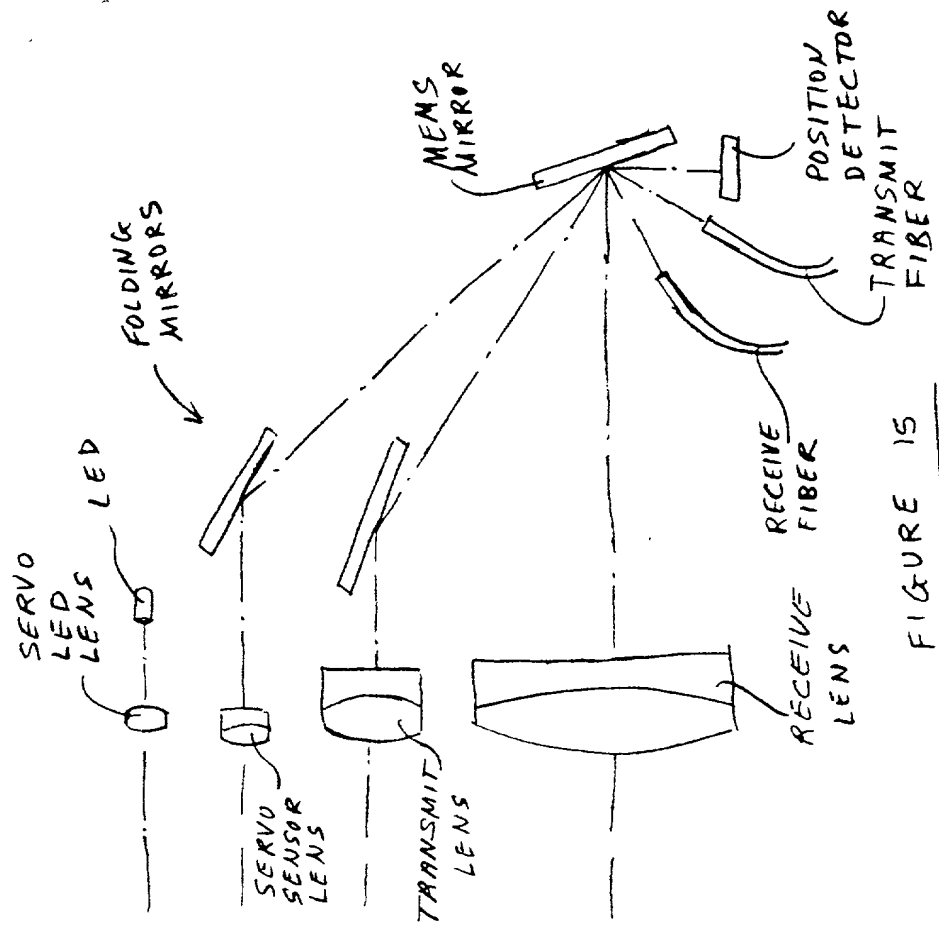


FIGURE 15